

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP COMMITTEE
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

Game Branch / HPC Project Number: 13-405

PROJECT INFORMATION

Project Title: (20C, 42, 44A, 44B) Adaptive Lion Management Project

Region and Game Management Unit: 20C, 42, 44A, 44B

Local Habitat Partnership Committee (LHPC):
• Southwest

Was the project presented to the LHPC?
YES[x] **NO**[]

Has this project been submitted in previous years? **YES**[x] **NO**[]

If Yes, was it funded? **YES**[x] **NO**[] → **Funded HPC Project #(s):** 09-405, 12-407

Project Type: Adaptive Lion Management Project

Brief Project Summaries:

20C, 42,44A, 44B Adaptive Lion Management Plan

Region 4, North Sector has begun implementing the approved 20C, 42,44A, 44B Adaptive Lion Management Plan which provides for collaring lions with GPS/satellite collars and collecting natural history data such as demographics, home range size, movement corridors, DNA based regional relatedness of individuals and most importantly prey species selection and frequency. In addition, the plan allows for the integrated management of both bighorn sheep populations and the mountain lion population within the project area. As an adaptive management plan we continually evaluate information and results to formulate modifications and changes in strategy to both meet objectives and test assumptions.

Big Game Wildlife Species to Benefit: Bighorn Sheep and Mountain Lions, Mule Deer, Javelina

Implementation Schedule (Month/Day/Year):

Project Start Date: 1-1-14

Project End Date: 1-1-15

Environmental Compliance:

NEPA Completed: Yes[] No[] N/A[x]

Projected Completion Date: _____

State Historic Preservation Office - Archaeological Clearance:

Yes[] No[] N/A[x]

Projected Completion Date: _____

Arizona Game and Fish Department

EA Checklist: Completed on 5-19-12

PROJECT FUNDING

Special Big Game License Tag Funds Requested: \$ 11,000

Cost Share or Matching Funds: \$ 8,692

Total Project Costs: \$ 19,692

PARTICIPANT INFORMATION

Applicant (please print):

Dave Conrad

Address:

E-mail:

dconrad@azgfd.gov

Telephone: 623-910-7872

Date: 8-28-13

Project has been coordinated with:

Game Branch, Habitat Branch, ADBSS

NEED STATEMENT – PROBLEM ANALYSIS:

Since initial implementation of the project in June of 2010 and the beginning of field work in February of 2012 the following is an itemized accounting of expenditures from the tag fund monies;

TAG FUND (09-405)..... \$27,800

NORTHSTAR (gps collars, trap alarms, collar and trap alarm repair and programming,
data transmission airtime, battery replacement)..... \$19,800
SIRTRACK (website and data charges)..... \$3,595
VETERINARY (capture drugs, medical supplies)..... \$549
MISC. EQUIPMENT (electronic calls, ear tags and pliers, snare hardware etc.)..... \$1,422
LOWES (50% cost share with KOFA project on chest freezer)..... \$413
TAX..... \$1,148
REMAINING FUNDS..... \$873

TAG FUND (12-407)..... \$7,000

MISC. EQUIPMENT (spring arms, snare hardware, etc.)..... \$789
VETERINARY (capture drugs, medical supplies)..... \$520
POLARIS RANGER REPAIR/SERVICE..... \$962
SIRTRACK (website and data charges)..... \$2,400
REMAINING FUNDS..... \$3,200

PROJECT OBJECTIVES:

Region 4, North Sector has begun implementing the approved 20C, 42,44A, 44B Adaptive Lion Management Plan which provides for collaring lions with GPS/satellite collars and collecting natural history data such as demographics, home range size, movement corridors, DNA based regional relatedness of individuals and most importantly prey species selection and frequency. In addition, the plan allows for the integrated management of both bighorn sheep populations and the mountain lion population within the project area. As an adaptive management plan we continually evaluate information and results to formulate modifications and changes in strategy to both meet objectives and test assumptions.

PROJECT DESCRIPTION AND STRATEGIES:

Bighorn sheep populations within the project area were divided into herd management areas (HMA) and population objectives were established for each HMA based on amount and quality of habitat. Based on where an individual HMA population is in relation to its objective determined how many sheep an individual lion is allowed to kill before the lion is lethally removed.

Since field work began in February 2012, 10 lions have been captured, 2 lethally removed, 1 killed by sport harvest, 1 killed by car, 1 died of natural causes and 5 are currently collared (1 collar malfunctioning). The number of lions that have been captured by mountain ranges is as follows; Vulture Mountains – 2, Black Mountains – 2, Harcuvar Mountains – 4, Harquahala Mountains – 1, Divide Mountains -1

In addition to the existing snaring regime we used a large-scale lion snaring effort incorporating the use of satellite trap alarms and volunteers to monitor snare sites. This 14 day large-scale snare effort

resulted in the capture of 3 lions. We plan to repeat this volunteer assisted effort between March 1 - April 30, for a 20 day period, over the entire project area.

PROJECT LOCATION:

See attached map

LAND OWNERSHIP AT THE PROJECT SITE(S):

(if the project area is private property, please state specifically and provide the landowner's name)

- BLM, State Lands

HABITAT DESCRIPTION:

Chaparral, Sonoran Desert Scrub (Upper and Lower Division). Basin and range area of Arizona with large mountains, cliffs, mesas and bajadas trending into alluvial valley bottoms.

ITEMIZED USE OF FUNDS:

REMAINING FUNDS..... \$3,200

GPS Collars x 4 \$6400

VHF Transmitters x 6..... \$900

Airtime/data transmission coverage..... \$4000

Veterinary supplies..... \$600

Equipment repair/service and misc. equipment/hardware purchases..... \$2300

FUNDING REQUEST..... for the period through 12-31-14..... \$11,000

COST SHARE/MATCHING FUNDS

Volunteer time on snaring effort 15 people for 20 days.....\$4,242

Volunteer mileage 100 man days @ 100 miles/day average @ \$.445/mile.....\$4450

TOTAL MATCH.....\$8,692

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

ADBSS

PROJECT MONITORING PLAN:

Annual Report

PROJECT MAINTENANCE:

Region 4

PROJECT COMPLETION REPORT TO BE FILED BY:

Dave Conrad (Annual Report)